

REMARKS

This response is in response to the final Office action (Paper No. 6) dated 17 November 2003.

Claims 1 through 16 and 24 through 34 are pending in this application.

Claim 24 has been amended to incorporate the features of claim 27. Claims 26 and 27 have been canceled without prejudice or disclaimer as to its subject matter

No new matter has been amended.

The amendments merely cancel claims, removes issues for appeal, or in some other way require a cursory review by the examiner. The entry of the amendments are respectfully requested.

I. CLAIM OBJECTIONS

Claims 4-5 and 26-28 stand objected to under 37 CFR 1.75(c) as being improper dependent form for failing to further limit the subject matter of a previous claim.

The petition to withdraw the objection and to provide a non-final Office action is concurrently filed with this Amendment. The arguments in the petition are hereby repeated.

The examiner's objection is not proper for the following reasons.

First, the claims 4-5 and 26-28 are not directed to "intended use."

The "intended use" means "intended to be employed," a purpose of the invention, or the utility of the invention. The examiner explained "intended use" by citing *Ex parte Masham* on page 4 of the final Office action and asserted that "it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed

apparatus from a prior art apparatus satisfying the claimed structural limitations.” *Ex parte Masham*, 2 USPQ2d 1647.

In *Ex parte Masham*, the claim 1 reads as follows: “1. An apparatus for mixing flowing developer material, including...” In *Ex parte Masham*, the issue was whether the intended use of the invention in the preamble differentiates the claimed apparatus from a prior art apparatus.

It is hardly understood why the features of the elements recited in claims 4-5 and 26-28 are regarded as the intended use of the invention. In the present application, the intended use of the washing machine is washing an article. The examiner is confused between the intended use of the invention (i.e., washing machine) and the features of the element.

The examiner’s reasoning on the basis of the “intended use” is not proper.

Second, the features recited in claims 4, 5 and 26-28 further limit the subject matter of the parent claim.

If a feature recited in a dependent claim is necessarily present in the parent claim, the dependent claim reciting only the feature may be improper. (For example, where Claim 1 recites “A desk comprising four legs and a plate mounted on said four legs,” and Claim 2 recites “The desk of claim 1, wherein said four legs support the plate,” claim 2 may be improper because claim 2 merely recites the function necessarily performed by claim 1.) Here, however, the features recited in claims 4-5 and 26-28 are not necessarily present in their parent invention. For example, in claim 3 of the present application, the controller may control (1) the heater independently of the inputted washing course or (2) the circulating pump and the heater in accordance with the inputted washing course.

as claimed in claim 4. That is, the feature of claim 4 is not necessarily present in claim 3. Regarding claim 5 of the present application, the “washing course” to be inputted into the washing machine may include “a boiling course” or may not include “a boiling course.” Likewise, the features recited in claims 26-28 are not necessarily present in their parent claims. Also, it is clear to the ordinary skilled person in the art that the recitation of the features in claims 4-6 and 26-28 result in different structural elements. Therefore, since claims 4-5 and 26-28 further limit the subject matter of the parent claim, the dependent claims 4-5 and 26-28 are proper.

Third, the law permits the applicant to define an element by what it does.

MPEP 2173.05(g) states that:

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step.

The law clearly permits the applicant to define an element by what it does.

The examiner argued that

“A careful reading of *Swinehart* will reveal that the indicated case is distinguishable from the current situation. In *Swinehart* the court held that the recitation of “transparent to infrared rays,” while language was functional, it was precise and definite enough to provide clear-cut indication of scope of subject matter. This however is not the case in the present situation. In the instant case, applicant is attempting to claim the operation of the claimed apparatus in dependent claim form, which is entirely different than claiming function in place of structure as in *Swinehart*.” (Page 5, lines 7-15 in the final Office action.)

It is hardly understood what the examiner’s reasoning is. The examiner did not argue that the claims 4-5 and 26-28 were not precise and definite enough to provide clear-cut indication of scope of subject matter. In view of this fact, it looks like that the examiner improperly argued that the functional language only cannot be used in the dependent claims because the functional language itself is not given any patentable weight, and thus in the present case the dependent claims 4-5 and 26-28 failed to further limit the subject matter of the parent claims. If the applicant’s understanding of the examiner’s reasoning is correct, the examiner’s reasoning is still not proper. In *In re Swinehart*, the court held that “it is elementary that the mere recitation of a newly discovered function or property, *inherently possessed* by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art.” 169 USPQ 226, 229 (CCPA 1971). That is, In *In re Swinehart*, while the court held that the function inherently possessed by the prior art did not cause the claim to distinguish over the prior art, the court did not hold that the applicant cannot

define an element by what it does or that every functional language should not be given any patentable weight. The examiner must consider whether the languages in claims 4-5 and 26-28 are a mere recitation of the function inherently possessed by the parent claim to determine whether the features are not given any patentable weight. As stated above, since the features of claims 4-5 and 26-28 are not inherently possessed by the parent claim, claims 4-5 and 26-28 properly further limit the subject matter of their parent claims.

Finally, the dependent claims 4-5 and 26-28 include every limitation of the parent claim.

MPEP §608.01(n) states that “Claims which are in improper dependent form for failing to further limit the subject matter of a previous claim should be objected to under 37 CFR 1.75(c) by using form paragraph 7.36. Here, the examiner properly used form paragraph 7.36 for objecting to the dependent claims 4-5 and 26-28.

It should be noted that MPEP §608.01(n), PTO form paragraph 7.36 Examiner Note 2 clearly says that:

“The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim.”

It is clear from form paragraph 7.36 Examiner Note 2 that the test for the examiner’s objection in this case is whether the dependent claims 4, 5 and 26-28 include every limitation of their parent claims. Nonetheless, the examiner disregarded the test cited in the Examiner Note of form

paragraph 7.36. (Instead, the examiner improperly applied the test of whether the claims differ in scope and incorrectly concluded that the claims 4-5 and 26-28 do not differ in scope.) Here, the examiner did not argue that the dependent claims 4-5 and 26-28 fail to include every limitation of the parent claim and it is clear that the dependent claims 4-5 and 26-28 include every limitation of the parent claim.

Since claims 4-5 and 26-28 meet the test for PTO form paragraph 7.36, the dependent claims 4-5 and 26-28 are proper.

II. CLAIM REJECTIONS - 35 U.S.C. §103

Claims 24 and 29-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. 3,927,972 to Kawamura et al. (Hereinafter “Kawamura”) in view of U.S. 5,960,804 to Cooper et al. (Hereinafter “Cooper”). Claims 24, 29-32 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. 955,993 to Psarski in view of Cooper.

Claim 24 has been amended to incorporate the features of claim 27. Accordingly, claims 26 and 27 have been canceled.

First, since the controller recited in claim 24 was not disclosed in the cited references, there is no *prima facie* case of obviousness.

“To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

"All words in a claim must be considered in judging the patentability of that claim against the prior

art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." MPEP 2143.03.

Claim 24 as amended recites the feature of the relationship between the predetermined temperature, the predetermined operation time, and the predetermined suspension time. These features show one of the novelties of the present invention and are important to achieve the intended objects. The specification of the present application states one of the advantages explicitly as follows:

“For another example, where the material requires a high temperature washing, the circulation pump 88 stops for a relatively long time so that the washing is soaked sufficiently. Oppositely, where the material requires a low temperature washing, the circulation pump 88 stops for a relatively short time so that washing water is continuously poured on the washing.” (Page 13, lines 12-16).

This advantages was never attained in the prior art. In other words, Cooper does not disclose the controller showing all the features of the controller of claim 24. Since the washing machine incorporating the features recited in claim 27 as amended is not disclosed in the prior art, there is no prima facie case of obviousness.

The examiner further cited the case law, *In re Vennor*, 262 F.2d 91, 95, 120 USPQ 193, 194; “broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.”

This holding cannot be applied to the present claim because the cited references do not

disclose the same manual activity as recited in claim 24.

Moreover, in the above holding of *In re Vennor* cited by the examiner, the court cited the decision of *In re Rundell*. In *In re Rundell* cited by *In re Vennor*, the court held that:

“The mere statement that a device is to be operated automatically instead of by hand, **without a claim specifying any particular automatic mechanism**, is not the statement of an invention.” *In re Rundell*, (Emphasis added.) *In re Rundell*, 9 USPQ 220, 221.

The courts did not hold that any automatic means are unpatentable. For example, even if a washing machine replaces manual washing which accomplishes the same result, the washing machine itself can be patentable by specifying the mechanism of the washing machine. If not, a washing machine itself should never have been patented because a hand washing accomplishes the same result or sometime better result. Here, claim 24 does not merely provide a mechanical or automatic means without specifying mechanisms. The features of the controller for achieving the mechanism is specified in the claims, and the claimed feature was not found in the prior art washing machine.

Therefore, the examiner’s argument is not proper.

Second, the claimed invention as a whole is patentable.

In determining the differences between the prior art and the claims, the question under 35

U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983).

MPEP 2141.02 states inter alia:

“[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the ‘subject matter as a whole’ which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103.” *In re Sponnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969).

Therefore, the examiner’s attention is invited to consider that the present application recognizes the problems and these problems were not recognized in the cited references. This should be considered in determining the obviousness of the invention.

Particularly, the specification of the present application identifies that “[i]f the temperature of washing water rises, the part of the washing contacting with air is oxidized, and therefore it may be damaged.” (Page 4, lines 1-3). Accordingly, how the circulating pump and the heater are controlled is important to solve this problem. It should be noted that Kawamura et al. and Psarski are directed to machine for textile treatment such as dyeing, not directed for conventional washing machine. That is, the main purpose of the machine of Kawamura et al. or Psarski is to chemically modify the textile (e.g., by oxidizing the textile). The source of the problem to be solved by the present application is not found in Kawamura or Psarski. One of the ordinary skilled person could not recognize the problem, solve the problem, or make the present invention from the prior art inventions mainly for chemically modifying textiles. Rather, in view of the fact that Kawamura and

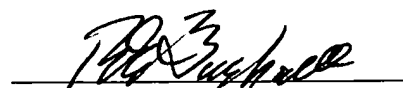
Psarski are for chemically modifying textiles, the cited references teach away from the problem and the solution of the present invention.

Therefore, the claimed invention is not obvious over Kawamura, Psarski, and/or Cooper taken separately or in combination when the claimed invention as a whole is considered, particularly, when the problems to be identified in the present invention are considered.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by this amendment. Should the other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



Robert E. Bushnell,
Attorney for the Applicant
Registration No. 27,774

1522 "K" Street, N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56564
Date: 1/16/04
I.D.: REB/JHP